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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/494,954 | 02/01/2000 | Roger A. McCurdy | TRW(TE)4170 | 4158 |

7590 12/12/2001
Tarolli Sundheim Covell Tummino & Szabo LLP
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Cleveland, OH 44114-1400

EXAMINER

LUM, LEE S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3611

DATE MAILED: 12/12/2001

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/494,954

Applicant(s)
McCurdy, Roger

Examiner
Lum, Lee S.

Art Unit
3611



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Amendment filed 4/25/01

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-22 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

20) ☐ Other: _____

SUPPLEMENTAL DETAILED ACTION

1. The Final Action mailed 7/9/01 is retracted, and this nonfinal Action replaces the same.
2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 5, "said accelerometer" lacks antecedent basis.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-7, 10, 12, 13, 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Breed 6209909.

Breed discloses a system (Fig 1) for protecting a vehicle occupant comprising
crash sensor 130,
acoustic sensor 130 (plurality of sensors 130 - Col 7, lines 55-60) which senses acoustic activity propagating through the vehicle structure*, and provides signals indicative of the crash event,
occupant protection devices 500, and,
controller 145.

* "Vehicle structure" is broadly interpreted to mean the entire vehicle, including its interior. Further, it is well-known that acoustic activity propagates throughout the vehicle, including its "[physical] structure", and an acoustic sensor is capable of detecting this activity. Therefore, it is

immaterial to reiterate these facts as limitations on acoustic activity, or as a function of an acoustic sensor.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breed 6209909 in view of Foo et al 6036225.

Breed does not disclose a plurality of accelerometers as crash sensors, while Foo shows these sensors 14/16, which are functionally equivalent to acoustic crash sensors. Nevertheless, it would have been obvious to one with ordinary skill in the art at the time at which the invention was made to include another type of crash sensor to increase the accuracy of determining a crash event, therefore increase the efficiency of the airbag system.

5. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure: Ando 6198999, Kraft 6099030, Thompson et al 6020812, Corrado et al 6026340, 5890085, Breed et al 6009970, 5848802, 5653462, Breed 5684701, Stanley 6007095, Varga et al 5943295.


6. RESPONSE TO REMARKS: Moot in light of new art rejections.

7. Communication with the Examiner and USPTO

Any inquiry concerning this communication should be directed to Ms. Lum at (703) 305-0232, 9-530, M-F. Her supervisor, Ms. Judy Swann, can be reached at (703) 306-4115.

Our fax number is (703) 308-2571. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer assistance at (703) 306-5771.

Ms. Lee S. Lum
Examiner
12/3/01


J. J. SWANN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600